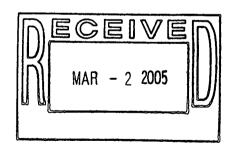
Rocky Flats Environmental Technology Site

Building 776 Area VI Final Survey Report

Survey Unit: 776004

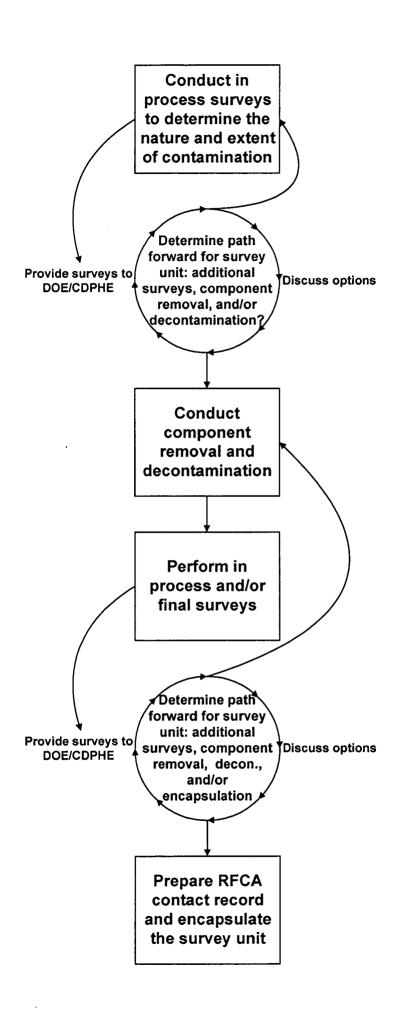
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January 2005

ADMIN RECORD





Introduction and Scope

A pre-demolition radiological survey (PDS) is performed prior to building demolition to define the radiological conditions of a facility. A PDS survey for survey unit 776004 has been completed in accordance with guidelines outlined in the "Radiological Pre-Demolition Survey Plan Building 776/777". Based on the results it is recommended that no further remediation is needed, and that the survey unit may be encapsulated in preparation for demolition. Isolation controls shall be put in place to prevent recontamination of the area. This report has been prepared in accordance with sections 3 and 8 of the "Radiological Pre-Demolition Survey Plan Building 776/777".

Survey unit 776004 includes rooms 152, 154A and 154B, between column lines A-F, and 1-3W of Building 776.

PDS Methods and Techniques

The PDS survey results determine the Average Surface Contamination Value (ASCV $_{u}$) and source term for the survey unit. These parameters are used to determine whether the building may be demolished within the limits outlined in the "Radiological Pre-Demolition Survey Plan Building 776/777".

To comply with the "Radiological Pre-Demolition Survey Plan Building 776/777", a minimum of 30 survey points were selected per survey unit. A random start, systematic grid method was used to identify the survey point locations. Three types of surveys are performed at each survey point as follows:

- Painted surfaces are evaluated for potential contamination under coatings using sodium iodide (NaI) gamma detectors attached to a single channel analyzer windowed for the 59 keV gamma-ray (Am²⁴¹).
- Direct alpha surface contamination measurements are performed using a NE Electra survey instrument with attached DP-6 probe. This data may be compared to the NaI survey data to show the fraction of contamination that is directly on the surface verses imbedded in the material matrix.
- Removable surface alpha contamination surveys were performed by swiping the survey point with a 47mm filter paper then counting the filter paper on a SAC-4 alpha counter. This data may be used to determine the effectiveness of encapsulation following the PDS.

To conservatively determine the final Average Surface Contamination Value (ASCV_u) for the survey unit, the source term associated with inaccessible areas of the survey unit (as described below) is added to the source term calculated by the PDS survey.

ALARA Post-Remediation Surveys

Accessible Areas

In addition to the PDS used to determine the Average Surface Contamination Value $(ASCV_u)$ and source term for the survey unit, surveys were taken to determine the effectiveness of remediation efforts. Remediation is performed to demonstrate a reasonable best effort is made to maintain releases to the environment and dose to the workers ALARA.

Floors

The floors of survey unit 776004 consist of epoxy covered concrete. In-process measurements collected on the floor of 776004 show that approximately 3/4 of the floor had elevated activity. The contaminated portions of the floor surface of the survey unit were remediated by shaving before being re-surveyed. Remediation of the elevated floor areas resulted in a decontamination factor (DF) of 22.4 or a source term reduction of 95.5%.

Table 1
Floor Remediation Results

	Pre-Remediation	Post-Remediation
Maximum (dpm/100cm²)	29,833,691	837,843
Minimum (dpm/100cm²)	9,247	9,247
Average (dpm/100cm²)	2,404,900	107,398
Average (μCi/m²)	108.33	4.84
Survey Unit Floor Surface Area	354	354
Source Term (µCi)	38,349	1713.4

Walls

Survey measurements on the walls of survey unit 776004 were taken on an established 3-ft. by 3-ft. grid on each of the 16 wall sections within the survey unit. The lower half of wall 5 and 6 have average contamination values above 100,000 dpm/100cm². The remaining walls in room 152 were elevated as well. The lower half of all of the walls in room 152 were shaved. Follow-up survey results show only two sections of wall with elevated values remaining slightly >100,000 dpm/100cm². The remaining sections of the walls in the survey unit were all <100,000 dpm/100cm². Because the remaining source term on the walls is not significant, no further remediation is required. The following classifications have been applied to categorize the walls.

Type I – Structural or non-structural wall with average contamination levels ranging from < MDA to approximately 100,000 dpm/100 cm². These walls require no further remediation.

Type II – Structural or non-structural wall with average contamination levels that range from >100,000 dpm/100cm² to <1,000,000 dpm/100cm². Some of the type II walls are structural and it has been determined by Engineering that removal is not allowed. Additional mitigating techniques will be utilized to minimize the potential of a localized airborne event during demolition. For non-structural type II walls decontamination or partial wall removal will be evaluated to determine the possible reduction of the source term.

Type III - Structural or non-structural wall with average contamination levels that exceed >1,000,000 dpm/100cm². Some of the type III walls are structural and it has been determined by Engineering that no remediation is allowed. Additional mitigating techniques will be utilized to minimize the potential of a localized airborne event during demolition. For non-structural type III walls decontamination or partial wall removal is performed to reduce the source term.

Table 2
B776/777 Survey Unit 776004 - Wall Summary

		Initial Characterization (Average dpm/100 cm²)			Follow-up Characterization (Average dpm/100 cm²)			
Wall	Section	Type I	Type II	Type III	Type I	Type II	Type III	
776004-1	Α	2,876	· · · · · · · · · · · · · · · · · · ·		NA T		_	
776004-1	В	2,876			NA NA			
776004-1	С	2.876			S NA S			
776004-2	Α	13.301			NA T			
776004-3	Α	୍ 4,ମସେ	4.		N/A			
776004-3	В]	WALL			
776004-4	Α	49.770			N/A			
776004-4	В	50.331			$\nabla \Delta$			
776004-5	Α		243,584		N/A	139,021		
776004-6	Α		271,247		N/A	118,257		
776004-6	В	and the state of t	121,301		ତ୍ୟ ତରେ			
776004-7	Α	93,110			THE N/A	-		
776004-8	Α	16,337			N/A			
776004-8	В	27.347			WA 2			
776004-10	Α	34,345			NA NA			
776004-10	В	£2,005			REAL AND SEE			
7.7	Type I:							
	Type II:							
	Type III:							

Table 3
B776/777 Survey Unit 776004 - Wall Source Term

Wall Designation	Section	Wall Type	Area (ft²)	Area (m²)	Average dpm/100cm ² (before decon)	Average dpm/100cm ² (after decon)	Total Activity (μCi) (after decon)
776004-1	Α	l	360	33.4	2,876	2,876	4.3
776004-1	В	l	360	33.4	2,876	2,876	4.3
776004-1	С	l	360	33.4	2,876	2,876	4.3
776004-2	Α	I	375	34.8	13,301	13,301	20.9
776004-3	Α	l	281	26.1	4,063	4,063	4.8
776004-3	В	l	342	31.8	4,063	4,063	5.8
776004-4	Α	ı	351	32.6	48,770	48,770	71.6
776004-4	В	ı	351	32.6	50,331	50,331	73.9
776004-5	Α	11	360	33.4	243,584	139,021	209.2
776004-6	Α	11	360	33.4	271,247	118,257	177.9
776004-6	В	ı	360	33.4	121,301	91,959	138.4
776004-7	Α	ı	339	31.5	93,110	93,110	132
776004-8	Α	ı	356	33.1	16,337	16,337	24.4
776004-8	В	Ī	347	32.2	27,347	27,347	39.7
776004-10	Α	ı	159	14.8	34,345	34,345	22.8
776004-10	В	I	153	14.2	32,005	32,005	20.5
Total			5,214	484	60,527	42,596	954.8

Ceilings

Survey measurements revealed that all accessible ceiling surfaces in the survey unit are <100,000 dpm/100cm².

Inaccessible Areas

Floors

It is conservatively assumed that the contamination is uniformly distributed on both sides of each crack or seam and the contamination on the bottom of the crack or seam is the same magnitude as the contamination measured at the surface.

Contaminated seams were identified on the floor of survey unit 776004 located in survey grids 4-1, 4-2, 4-7, 4-8, 4-9, 4-10, 4-15, and 4-16 in room 152 and 4-3, 4-4, and 4-6 in room 154B. The seams were separated into two groups of seams. Group 1 seams could be effectively decontaminated. The highest contamination value for this group of seams was 7,401,235 dpm/100 cm² prior to decontamination. Most of the contaminated material was removed and readings in these seams were significantly reduced to levels between 24,581 and 157,946 dpm/100 cm² averaging 91,263 dpm/100 cm². The total length of these seams is approximately 126 feet (38.4 m) long by 6 inches (0.15 m) wide. The amount of activity remaining in this group of seams is estimated at:

Group 1 Seams

 $(2*38.4 \text{ m}*0.15 \text{ m})*(91,263 \text{ dpm}/100 \text{ cm}^2*10,000 \text{ cm}^2/\text{m}^2)*(1\mu\text{C}i/2.22\text{E}6 \text{ dpm}) = 47.9 \mu\text{C}i$

The amount of source term *removed* from this group of seams is conservatively estimated at:

 $(2*38.4 \text{ m}*0.15 \text{ m})*(7,401,235-91,263 \text{ dpm/100 cm}^2*10,000 \text{ cm}^2/\text{m}^2)*(1\mu\text{Ci/2.22E6 dpm}) = 3833.3 \mu\text{Ci}$

Group 2 seams were remediated down to soil. The highest contamination value for this group of seams was 187,738,695 dpm/100 cm² prior to decontamination. Much of the contaminated material was removed the final readings consist mostly of contamination in the soil. The final readings in these seams on the soil were between 536,598 and 35,699,457 dpm/100 cm² averaging 18,118,028 dpm/100 cm². The total length of these seams is approximately 156 feet (47.5 m) long by 6 inches (0.15 m) wide.

As usual, the source term from the soil was not considered part of the building source term.

The amount of source term *removed* from this group of seams is conservatively estimated at:

 $(2 \cdot 47.5 \text{ m} \cdot 0.15 \text{ m}) \cdot (132,813,758 - 18,118,028 \text{ dpm/}100 \text{ cm}^2 \cdot 10,000 \text{ cm}^2/\text{m}^2) \cdot (1\mu\text{Ci/}2.22\text{E6 dpm}) = 73,622.3 \mu\text{Ci}$

The total estimate of contamination removed from the seams identified above, as part of the ALARA process, is 77,455.6 µCI.

Ceiling

One localized spot of contamination in the ceiling identified in the in-process surveys exists. The area of contamination is approximately 0.1 m², and revealed levels up to approximately 11 million dpm/100 cm². The contamination appears to be between the metal ceiling surface and the concrete floor above. Special controls will be used in the future to remove this contamination from the survey unit. The remaining inaccessible areas of the ceilings have the same or less potential for contamination as the accessible areas of the walls and ceilings of survey unit 776004 and therefore were not evaluated. The amount of activity remaining in this inaccessible location is conservatively estimated at:

 $(0.1 \text{ m}^2) \circ (11,000,000 \text{ dpm}/100 \text{ cm}^2 * 10,000 \text{ cm}^2/\text{m}^2) * (1\mu\text{Ci}/2.22\text{E6 dpm}) = 49.5 \mu\text{Ci}$

Walls

The inaccessible areas of the walls have the same or less potential for contamination as the accessible areas of the walls and ceilings of survey unit 776004 and therefore were not evaluated.

PDS Data Summary

The values for the accessible areas and inaccessible areas were summed and divided by the total area for the survey unit to calculate the "Average Surface Contamination Value" (ASCV_u) and source term for the survey unit. The results are summarized in Table 4 below:

Table 4: PDS Final Results

	Final Results
776004 Inaccessible Area Source Term μCi)	97.4
776004 Accessible Area Source Term (μCi)	706
776004 Total Source Term (μCi)	803.4
Survey Unit Wall, Ceiling, and Floor Area (m²)	1,218
(ASCV _u) ₍ μCi/m²)	0.66
(ASCV _u) (dpm/100cm ²)	14,604.7

Table 4 Notes:

Inaccessible areas source term from pages 4, and 5 of this report.

Accessible area source term is the sum of source terms attributed to floors, walls and ceiling as determined by the final PDS survey.

Total Source Term equals the sums of the source terms of Inaccessible Area + Accessible Area.

Total Source Term = $(100+706) \mu Ci = 803.4 \mu Ci$

Average Surface Contamination for the Survey Unit (ASCV_u) in dpm/100cm² equals: $(ASCV_u) = (803.4 \mu Ci)(22.200 \text{ dpm/}100cm^2 / 1 \mu Ci/m^2) / (1,218 m^2) = 14,604.7 \text{ dpm/}100cm^2$

In-Process Data for Survey Unit 776004

	Column	Column				Gross	1	Follow-up data
Location #	letter	Number	North	East	Elevation	Counts	dpm/100cm ²	dpm/100 cm ²
4-1	Е	3W	17	9	0	165419	29 833 691	152044
4-2	E	3W	12	11	0	58203	10:360.605	137911
4-3	E	2W	19	1	0	37840	3138.848	
4-4	Е	2W	18	19	0	5354	283,784	3041318
4-5	E	2W	1	11	0	31598	2:590:264	89,635
4-6	E	2W	1	9	0	32671	7 684 565	
4-7	E	3W	7	12	0	36672	6.450 0427	337793
4-8	Е	3W	2	6	0	4333	#578.477A	44,541
4-9	D	3W	16	6	0	4120	1537,791	32,092
4-10	D	3W	17	12	0	16198	2.731,455	320,592
4-11	D	2W	19	9	0	71192	6.070.021	50,074
4-12	D	2W	19	11	0	46128	3.887 247	408118
4-13	D	2W	7	13	0	4533	F211629	69,993
4-14	D	2W	1	2	0	11956	864 007	52,564
4-15	D	3W	2	11	0	22362	3.850.991	150,637
4-16	D.	3W	4	6	0	3423	4444129	63,907
4-17	С	3W	13	6	0	2292	14,677	14,677
4-18	С	3W	15	15	0	2225	9,419	9,419
4-19	С	2W	15	5	0	2362	20,829	20,829
4-20	С	2W	15	15	0	2365	21,093	21,093
4-21	С	2W	1	16	0	3085	84,371	84,371
4-22	С	2W	4	1	0	3629	182484	17,178
4-23	С	3W	7	13	0	2497	32,694	32,694
4-24	С	3W	1	5	0	5473	29/12/22	17,178
4-25	В	3W	11	7	0	5182	268.667	26,282
4-26	В	3W	15	15	0	2107	9,247	9,247
4-27	В	2W	11	5	0	2950	72,506	72,506
4-28	В	2W	12	13	0	37442	3.1084669	83,826
4-29	В	2W	8	14	0_	28920	2135/1905	44,541
4-30	В	2W	2	4	0	6298	148667/48	17,178
4-31	В	3W	4	13	0	3173	92,105	92,105
4-32	В	3W	5	7	0	38727	3.246888	17,178
4-33	Α	3W	18	7	0	10970	MANA S SA	17,178
4-34	Α	3W	18	17	0	3285	4087715 ₀	17,178
4-35	Α	2W	15	8	0	3280	ing IOTROCS	17,178
4-36	Α	2W	17	13	0	111328	9,597/4/3	17,178
4-37	Α	2W	5	13	0	2043	9,419	9,419
4-38	Α	2W	5	8	0	9876	681,204	17,178
4-39	Α	3W	6	17	0	6153	354,0 05	17,178
4-40	Α	3W	6	6	0	2075	9,419	9,419
4-41	E	3W	15	. 6	17	149	14,217	112,044
4-42	E	3W	17	17	17	209	39,307	137,911

In-Process Data for Survey Unit 776004

	Column	Column				Gross		Follow-up data
Location #	letter	Number	North	East	Elevation	Counts	dpm/100cm ²	dpm/100 cm ²
4-43	E	3W	15	5	17	175	65,009	837,843
4-44	E	2W	15	15	17	123	29,047	304,318
4-45	Е	2W	5	15	17	122	28,355	89,635
4-46	E	2W	5	5	17	123	29,047	491,750
4-47	E	3W	6	18	17	178	26,344	337,793
4-48	E	3W	2	3	17	164	20,490	44,541
4-49	D	3W	16	6	17	119	10,426	32,092
4-50	D	3W	19	6	17	160	18,817	320,502
4-51	D	2W	15	8	17	131	34,579	50,074
4-52	D	2W	15	15	17	376	204-049	498.113
4-53	D	2W	5	15	17	133	35,963	69,993
4-54	D	2W	7	7	17	123	29,047	52,564
4-55	D	3W	4	16	17	195	33,453	150,637
4-56	D	3W	7	3	17	177	25,926	63,907
4-57	С	3W	16	4	17	154	16,308	14,677
4-58	С	3W	17	18	17	175	25,089	9,419
4-59	С	2W	15	5	17	127	31,813	20,829
4-60	С	2W	15	15	17	93	14,471	21,093
4-61	С	2W	5	15	17	145	44,262	84,371
4-62	С	2W	5	5	17	133	35,963	17,178
4-63	С	3W	6	16	17	187	30,107	32,694
4-64	С	3W	5	8	17	176	25,508	17,178
4-65	В	3W	17	3	17	168	22,162	26,282
4-66	В	3W	15	15	17	118	10,426	9,247
4-67	В	2W	15	5	17	118	25,589	72,506
4-68	В	2W	15	15	17	146	44,953	83,826
4-69	В	2W	5	15	17	95	14,471	44,541
4-70	В	2W	6	6	17	140	40,804	17,178
4-71	В	3W	2	18	17	168	22,162	92,105
4-72	В	3W	2	8	17	187	30,107	17,178
4-73	Α	3W	15	6	17	155	16,726	17,178
4-74	Α	3W	18	16	17	132	10,426	17,178
4-75	Α	2W	15	5	17	110	20,056	17,178
4-76	Α	2W	15	15	17	111	20,748	17,178

Final Survey Instructions Rev. 0 (11/8/04) Building 776 1st Floor Survey Unit 776004

Purpose:

This instruction provides guidance for collecting gross gamma and removable contamination data to quantify the amount of residual contamination in Survey Unit 776004 prior to demolition. Nal measurements are performed in accordance with "INS-535-Ludlum2350-1 with Sodium Iodide Detector".

Equipment and materials:

- 1. A Ludlum 44-17 attached to a Ludlum 2350-1 set to collect five-minute counts that will be displayed on its LCD window.
- 2. A Bicron G-5 attached to a Ludlum 2350-1 set to collect five-minute counts that will be displayed on its LCD window.
- 3. One Electra with attached DP-6, calibrated and daily response checked.
- 4. Two probe holders, one for the G-5 and one for the 44-17 with tin shielding.
- 5. Calibrated and daily response checked SAC-4.
- 6. Measuring tape or laser range finder.

Note: The NE Electra with DP-6 probe and the Eberline SAC-4 shall be used in accordance with RSP- 7.01 and 7.02

Procedure:

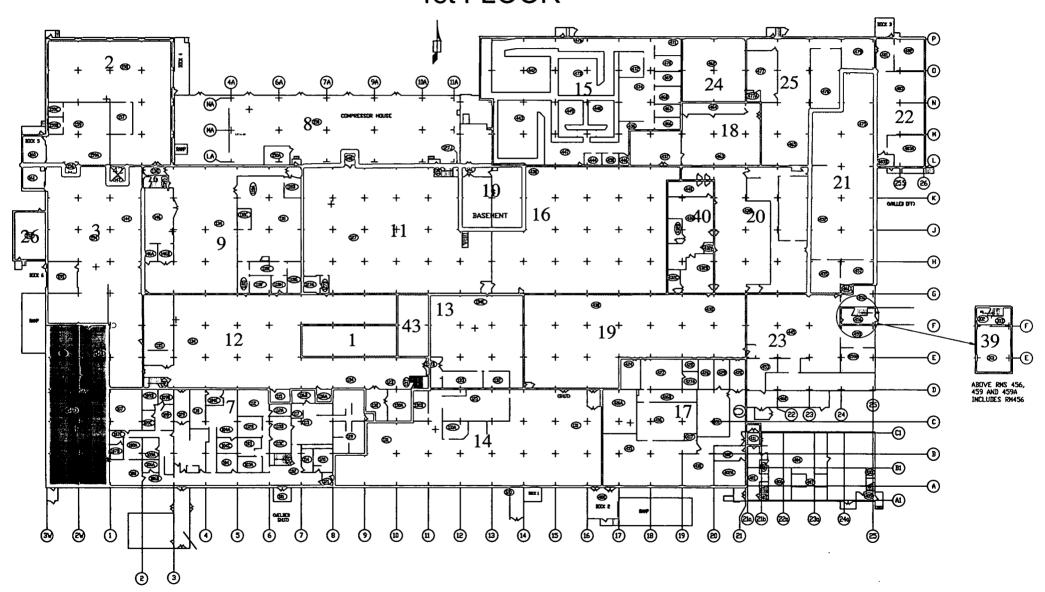
- 1. Inspect instrument for obvious damage and ensure battery voltage is equal to or greater than 4.6 volts. If battery voltage is less than 4.6 volts change the batteries.
- Complete daily performance checks for Sodium Iodide detectors to ensure the instrument is
 functioning properly by using Americium-241 source TS-912. Record results on Sodium Iodide Data
 Sheet.
- For floor and concrete wall background measurements, perform a 300-second background count with a
 Bicron G-5 for floors or Ludlum 44-17 for walls at background location in room 404. Record
 background counts next to "Bkg Floor" or "Bkg Concrete Wall" in background column of attached
 "Sodium Iodide Data Collection" sheets as needed.
- 4. For block wall background measurements, perform a 300-second background count with a Ludium 44-17 at background location in room 404. Record background counts next to "Bkg Block Wall" in background column of attached Sodium Iodide data collection sheets as needed.
- 5. For ceiling background measurements, perform a 300-second background count with a Ludlum 44-17 at background location in room 404. Hold the probe waist high, pointed toward ceiling using a sheet metal plate in front of the detector (take background measurement in this configuration). Record background counts next to "Bkg Metal Ceiling" in background column of attached Sodium Iodide data collection sheets as needed.
- 6. Mark the sample locations on the surfaces to be measured. Take all measurements on contact with the marked surface using tin side shields on the Bicron G-5 and tin side and back shields on the Ludlum 44-17. All Sodium Iodide readings shall have 300 second count times.
- 7. Collect sodium Iodide, total surface activity and removable surface activity measurements at all locations marked on the attached map.
- 8. Record the NaI and NE Electra measurements on the attached sheet. Note any items or conditions that may have affected the measurement in the "remarks" section.
- 9. Count swipes for 60 seconds with a SAC-4, record result on attached sheet for removable contamination.

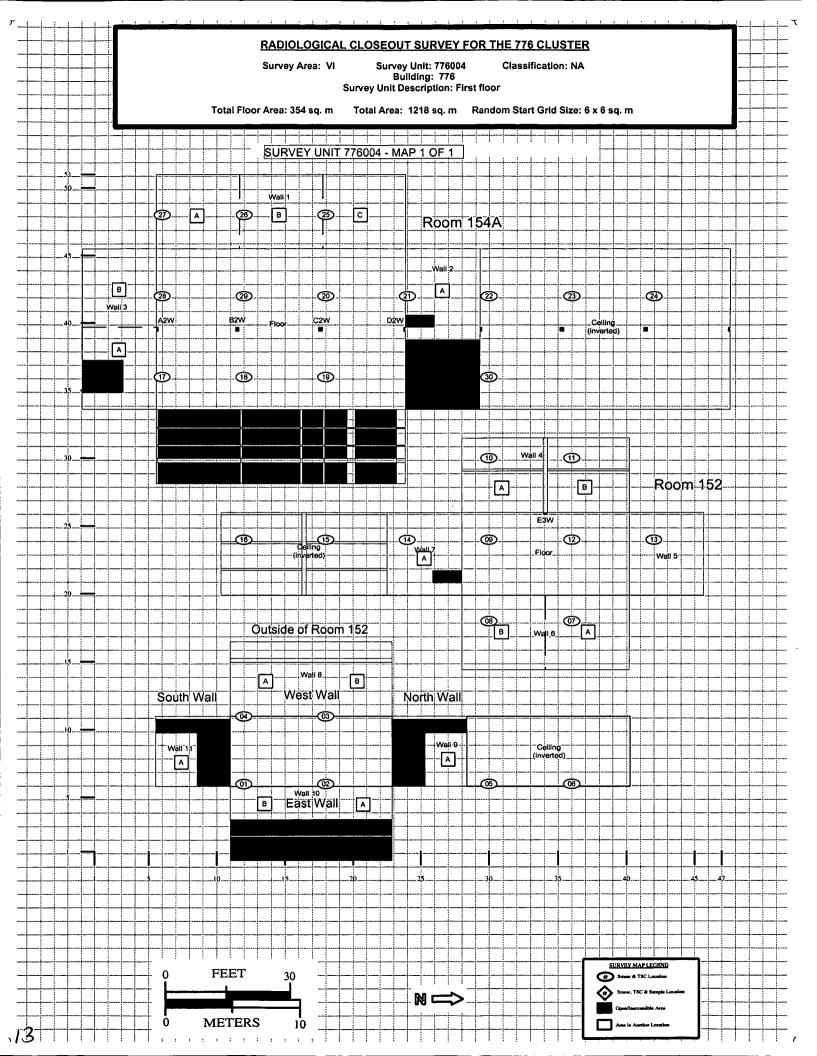
Final Survey Instructions Rev. 0 (11/8/04) Building 776 1st Floor Survey Unit 776004

Table 776004-1: Survey Requirements								
Surface	Type of Survey	Probe	Placement	Count Time				
Floor	Total Alpha Activity	Bicron G-5	On contact	300 seconds				
All Surfaces	Total Alpha Activity	Electra with DP-6	On contact	60 seconds				
Block walls	Total Alpha Activity	Bicron G-5 or Ludlum 44-17	On contact	300 seconds				
All Surfaces	Removable Alpha	SAC-4	Swipe in placed in tray	60 seconds				
Ceiling	Total Alpha Activity	Ludlum 44-17	On Contact	300 seconds				
Block Walls	Background measurement	Bicron G-5 or Ludlum 44-17	On contact with wall at location in room 404.	300 seconds				
Floors and cement walls	Background measurement	Bicron G-5 or Ludlum 44-17	On contact with floor in room 404.	300 seconds				
Metal ceilings	Background measurement	Ludlum 44-17	Probe waist high, pointed toward ceiling with sheet metal plate on end in room 404.	300 seconds				



B776/777 SURVEY UNITS 1st FLOOR





Total Activity Estimates Using Sodium Iodide Instruments

	Survey Area: VI Survey Unit: 776004	Survey Date(s):	12/23/04
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Sample Location #	RCT ID#	Instrument #	Gross Counts	Critical Level (dpm/100cm2)	Total Alpha (dpm/100cm2)
1	3	2	11368	4,645	4,645
2	3	2	11689	4,645	4,645
3	1	2	11135	4,645	4,645
4	3	2	10384	4,645	4,645
5	1	1	762	7,298	18,312
6	1	1	820	7,298	25,636
7	1	1	1453	9,985	37,634
8	1	1	1458	9,985	38,265
9	3	2	9448	4,645	4,645
10	1	1	630	9,985	9,985
11	1	1	861	9,985	9,985
12	1	2	11679	4,645	4,645
13	1	1	1551	9,985	50,010
14	1	1	1129	9,985	9,985
15	1	1	785	7,298	21,216
16	1	1	755	7,298	17,428
17	2	2	10426	4,645	4,645
18	2	2	10848	4,645	4,645
19	2	2	12892	4,645	22,780
20	2	2	8968	4,645	4,645
21	2	2	9049	4,645	4,645
22	3	1	759.	9,863	9,863
23	3	1	809	9,863	9,863
24	3	1	794	9,863	9,863
25	3	1	793	9,863	9,863
26	3	1	841	9,863	9,863
27	3	1	737	9,863	9,863
28	2	2	11334	4,645	4,645
29	2	2	11916	4,645	4,733
30	3	1	829	9,863	9,863

Total Surface Activity

				acc At		 	
Survey A	Area:	VI	Survey L	Jnit: 776004			
Meter Mo	odel:		NE Electra	a w/ DP6 Probe	1	Date:	12/23/04
		1	2	3			
Instrume	nt #:	4066	4062	N/A	N/A	A priori MDA:	94
Cal. Due	Date:	4/2/05	12/28/04	N/A	N/A	Avg. Local Bkgd	32.9
Efficiency	(c/d):	23.20%	22.30%	N/A	N/A	Avg. Efficiency	0.228
Sample			Local Bl	kgd			
Location #	RCT ID#	Inst.#	(cpm)	– 1	ss (cpm)	(dpm/100 c	m²)
1	3	2	5		41.0	158.2	
2	3	2	6		67.0	268.1	
3	3	2	1		60.0	259.3	
4	3	2	4		37.0	145.1	
5	11	1	5		6.0	4.4	
6	11	1	4		7.0	13.2	
7	11	1	10		43.0	145.1	
8	11	1	11		33.0	96.7	
9	1	1	10		15.0	22.0	
10	11	1	6		20.0	61.5	
11	1	1			•		
12	3	2	2	2 71.0		303.3	
13	11	1	13 29.0		29.0		
14	1	1	9		27.0	79.1	
15	1	1	6		15.0	39.6	
16	1	1	10		15.0	22.0	
17	3	2	9		41.0	140.7	<u>-</u>
18	3	2	8		16.0	35.2	
19	3	2	3		142.0	611.0	
20	3	2	1		66.0	285.7	
21	3	2	1		106.0	461.5	
22	3	2	2		12.0	44.0	
23	3	2	0		2.0	8.8	
24	3	2	2		6.0	17.6	
25	3	2	8		13.0	22.0	
26	3	2	7		14.0	30.8	
27	3	2	9		9.0	0.0	
28	3	2	6		9.0	13.2	
29	3	2	5		47.0	184.6	
30	3	2	2		1.0	-4.4	
					MIN	-4.4	
					MAX	611.0	
					MEAN	120.0	
					SD	146.7	

Removable Activity

Survey	Area:	VI	Survey	/ Unit:	776004
Dates Counted:	12/23/04				
A priori MDA:	16		· · · · · · · · · · · · · · · · · · ·		
Efficiency (c/d)	0.333				
Zinololloy (Gray	0.000				
0			Smear Results	•	
Smear Location	DOT 10 #	T	Dia ()	C==== (====)	(-1(4002)
Number	RCT ID#	Serial Number	Bkg. (cpm)	Gross (cpm)	(dpm/100 cm ²)
1	2	847	0.1	0.0	0
2	2	1051	0.5	3.0	8
3	2	1479	0.4	1.0	2
4	2	847	0.1	1.0	3
5	1	811	0.3	0.0	-1
6	1	811	0.3	0.0	-1
7	1	811	0.3	1.0	2
8	1	811	0.3	2.0	5
9	1	811	0.3	1.0	2
10	1	811	0.3	3.0	8
11	1	811	0.3	1.0	2
12	2	1051	0.5	1.0	2
13	1	811	0.3	1.0	2
14	1	811	0.3	2.0	5
15	1	811	0.3	2.0	5
16	11	811	0.3	0.0	-1
17	2	1479	0.4	5.0	14
18	2	847	0.1	0.0	0
19	2	1051	0.5	0.0	-2
20	2	1479	0.4	7.0	20
21	2	847	0.1	3.0	9
22	2	1051	0.5	10.0	29
23	2	1479	0.4	1.0	2
24	2	847	0.1	0.0	0
25	2	1051	0.5	0.0	-2
26	2	1479	0.4	0.0	-1
27	2	847	0.1	3.0	9
28	2	1051	0.5	0.0	-2
29	2	1479	0.4	1.0	2
30	2	847	0.1	2.0	6
				MIN	-1.5
				MAX	28.5
				MEAN	4.2
				SD	6.7

16/16